

SEQUENCE LISTING

<110> Locomogene, Inc.

<120> Pharmaceutical composition containing hsHRD3

<130> L7350.0011

<150> JP 2004-76931  
<151> 2004-03-17

<150> JP 2004-314364  
<151> 2004-10-28

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<170> PatentIn version 3.2

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Ile	Leu	Asn	Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg
		195					200					205			
Tyr	Leu	Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg
	210					215					220				
Val	Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln
225					230					235					240
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	Lys
				245					250					255	
Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	Val	Asn
			260					265					270		



Ser Ser Gln Ala Lys Ala Leu Val Tyr Tyr Thr Phe Gly Ala Leu Gly  
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Gly Asn Leu Ile Ala His Met Val Leu Gly Tyr Arg Tyr Trp Ala Gly  
290 295 300

Ile Gly Val Leu Gln Ser Cys Glu Ser Ala Leu Thr His Tyr Arg Leu  
305 310 315 320

Val Ala Asn His Val Ala Ser Asp Ile Ser Leu Thr Gly Gly Ser Val  
325 330 335

Val Gln Arg Ile Arg Leu Pro Asp Glu Val Glu Asn Pro Gly Met Asn  
340 345 350

Ser Gly Met Leu Glu Glu Asp Leu Ile Gln Tyr Tyr Gln Phe Leu Ala  
355 360 365

Glu Lys Gly Asp Val Gln Ala Gln Val Gly Leu Gly Gln Leu His Leu  
370 375 380

His Gly Gly Arg Gly Val Glu Gln Asn His Gln Arg Ala Phe Asp Tyr  
385 390 395 400

Phe Asn Leu Ala Ala Asn Ala Gly Asn Ser His Ala Met Ala Phe Leu  
405 410 415

Gly Lys Met Tyr Ser Glu Gly Ser Asp Ile Val Pro Gln Ser Asn Glu  
420 425 430

Thr Ala Leu His Tyr Phe Lys Lys Ala Ala Asp Met Gly Asn Pro Val  
435 440 445

Gly Gln Ser Gly Leu Gly Met Ala Tyr Leu Tyr Gly Arg Gly Val Gln  
450 455 460

Val Asn Tyr Asp Leu Ala Leu Lys Tyr Phe Gln Lys Ala Ala Glu Gln  
465 470 475 480

Gly Trp Val Asp Gly Gln Leu Gln Leu Gly Ser Met Tyr Tyr Asn Gly  
485 490 495

Ile Gly Val Lys Arg Asp Tyr Lys Gln Ala Leu Lys Tyr Phe Asn Leu  
500 505 510

Ala Ser Gln Gly Gly His Ile Leu Ala Phe Tyr Asn Leu Ala Gln Met  
515 520 525

His Ala Ser Gly Thr Gly Val Met Arg Ser Cys His Thr Ala Val Glu  
530 535 540

Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met  
545 550 555 560

Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile  
565 570 575

Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn  
580 585 590

Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn  
595 600 605

Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln  
610 615 620

Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly  
625 630 635 640

Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu  
645 650 655

Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr  
660 665 670

Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys  
675 680 685

Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro  
690 695 700

Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr  
705 710 715 720

Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp  
725 730 735

Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala  
740 745 750

Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp  
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Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln  
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Leu Leu Asn Thr Ile Ala Lys Ser Arg Asp Pro Met Lys Glu Ala Ala  
35 40 45

Met Glu Pro Asn Ala Asp Glu Phe Val Gly Phe Tyr Val Pro Met Asp  
50 55 60

Tyr Ser Pro Arg Asn Glu Glu Lys Asn Tyr Gln Ser Ile Trp Gln Asn  
65 70 75 80

Glu Ile Thr Asp Ser Gln Arg His Ile Tyr Glu Leu Leu Val Gln Ser  
85 90 95

Ser Glu Gln Phe Asn Asn Ser Glu Ala Thr Tyr Thr Leu Ser Gln Ile  
100 105 110

His Leu Trp Ser Gln Tyr Asn Phe Pro His Asn Met Thr Leu Ala His  
115 120 125

Lys Tyr Leu Glu Lys Phe Asn Asp Leu Thr His Phe Thr Asn His Ser  
130 135 140

Ala Ile Phe Asp Leu Ala Val Met Tyr Ala Thr Gly Gly Cys Ala Ser  
145 150 155 160

Gly Asn Asp Gln Thr Val Ile Pro Gln Asp Ser Ala Lys Ala Leu Leu  
165 170 175

Tyr Tyr Gln Arg Ala Ala Gln Leu Gly Asn Leu Lys Ala Lys Gln Val  
180 185 190

Leu Ala Tyr Lys Tyr Tyr Ser Gly Phe Asn Val Pro Arg Asn Phe His  
195 200 205

Lys Ser Leu Val Leu Tyr Arg Asp Ile Ala Glu Gln Leu Arg Lys Ser  
210 215 220

Tyr Ser Arg Asp Glu Trp Asp Ile Val Phe Pro Tyr Trp Glu Ser Tyr  
225 230 235 240

Asn	Val	Arg	Ile	Ser	Asp	Phe	Glu	Ser	Gly	Leu	Leu	Gly	Lys	Gly	Leu	245	250	255
Asn	Ser	Val	Pro	Ser	Ser	Thr	Val	Arg	Lys	Arg	Thr	Thr	Arg	Pro	Asp	260	265	270
Ile	Gly	Ser	Pro	Phe	Ile	Ala	Gln	Val	Asn	Gly	Val	Gln	Met	Thr	Leu	275	280	285
Gln	Ile	Glu	Pro	Met	Gly	Arg	Phe	Ala	Phe	Asn	Gly	Asn	Asp	Gly	Asn	290	295	300
Ile	Asn	Gly	Asp	Glu	Asp	Asp	Glu	Asp	Ala	Ser	Glu	Arg	Arg	Ile	Ile	305	310	315
Arg	Ile	Tyr	Tyr	Ala	Ala	Leu	Asn	Asp	Tyr	Lys	Gly	Thr	Tyr	Ser	Gln	325	330	335
Ser	Arg	Asn	Cys	Glu	Arg	Ala	Lys	Asn	Leu	Leu	Glu	Leu	Thr	Tyr	Lys	340	345	350
Glu	Phe	Gln	Pro	His	Val	Asp	Asn	Leu	Asp	Pro	Leu	Gln	Val	Phe	Tyr	355	360	365
Tyr	Val	Arg	Cys	Leu	Gln	Leu	Leu	Gly	His	Met	Tyr	Phe	Thr	Gly	Glu	370	375	380
Gly	Ser	Ser	Lys	Pro	Asn	Ile	His	Met	Ala	Glu	Glu	Ile	Leu	Thr	Thr	385	390	395
Ser	Leu	Glu	Ile	Ser	Arg	Arg	Ala	Gln	Gly	Pro	Ile	Gly	Arg	Ala	Cys	405	410	415
Ile	Asp	Leu	Gly	Leu	Ile	Asn	Gln	Tyr	Ile	Thr	Asn	Asn	Ile	Ser	Gln	420	425	430
Ala	Ile	Ser	Tyr	Tyr	Met	Lys	Ala	Met	Lys	Thr	Gln	Ala	Asn	Asn	Gly	435	440	445
Ile	Val	Glu	Phe	Gln	Leu	Ser	Lys	Leu	Ala	Thr	Ser	Phe	Pro	Glu	Glu	450	455	460
Lys	Ile	Gly	Asp	Pro	Phe	Asn	Leu	Met	Glu	Thr	Ala	Tyr	Leu	Asn	Gly	465	470	475
Phe	Ile	Pro	Ala	Ile	Tyr	Glu	Phe	Ala	Val	Met	Ile	Glu	Ser	Gly	Met	485	490	495
Asn	Ser	Lys	Ser	Ser	Val	Glu	Asn	Thr	Ala	Tyr	Leu	Phe	Lys	Thr	Phe	500	505	510
Val	Asp	Lys	Asn	Glu	Ala	Ile	Met	Ala	Pro	Lys	Leu	Arg	Thr	Ala	Phe	515	520	525
Ala	Ala	Leu	Ile	Asn	Asp	Arg	Ser	Glu	Val	Ala	Leu	Trp	Ala	Tyr	Ser	530	535	540
Gln	Leu	Ala	Glu	Gln	Gly	Tyr	Glu	Thr	Ala	Gln	Val	Ser	Ala	Ala	Tyr	545	550	555

Leu Met Tyr Gln Leu Pro Tyr Glu Phe Glu Asp Pro Pro Arg Thr Thr  
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 Asp Gln Arg Lys Thr Leu Ala Ile Ser Tyr Tyr Thr Arg Ala Phe Lys  
 580 585 590  
 Gln Gly Asn Ile Asp Ala Gly Val Val Ala Gly Asp Ile Tyr Phe Gln  
 595 600 605  
 Met Gln Asn Tyr Ser Lys Ala Met Ala Leu Tyr Gln Gly Ala Ala Leu  
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 Lys Tyr Ser Ile Gln Ala Ile Trp Asn Leu Gly Tyr Met His Glu His  
 625 630 635 640  
 Gly Leu Gly Val Asn Arg Asp Phe His Leu Ala Lys Arg Tyr Tyr Asp  
 645 650 655  
 Gln Val Ser Glu His Asp His Arg Phe Tyr Leu Ala Ser Lys Leu Ser  
 660 665 670  
 Val Leu Lys Leu His Leu Lys Ser Trp Leu Thr Trp Ile Thr Arg Glu  
 675 680 685  
 Lys Val Asn Tyr Trp Lys Pro Ser Ser Pro Leu Asn Pro Asn Glu Asp  
 690 695 700  
 Thr Gln His Ser Lys Thr Ser Trp Tyr Lys Gln Leu Thr Lys Ile Leu  
 705 710 715 720  
 Gln Arg Met Arg His Lys Glu Asp Ser Asp Lys Ala Ala Glu Asp Ser  
 725 730 735  
 His Lys His Arg Thr Val Val Gln Asn Gly Ala Asn His Arg Gly Asp  
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 Asp Gln Glu Glu Ala Ser Glu Ile Leu Gly Phe Gln Met Glu Asp Leu  
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 Val Thr Met Gly Cys Ile Leu Gly Ile Phe Leu Leu Ser Ile Leu Met  
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 Ser Thr Leu Ala Ala Arg Arg Gly Trp Asn Val Arg Phe Asn Gly Ala  
 785 790 795 800  
 Gln Leu Asn Ala Asn Gly Asn Arg Gln Gln Glu Gln Gln Gln Gln  
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